# THE OHIO JOURNAL OF SCIENCE

VOLUME 58-1958

HENRY L. PLAINE, Editor-in-Chief

PUBLISHED AT COLUMBUS, OHIO, BY

THE OHIO STATE UNIVERSITY

and

THE OHIO ACADEMY OF SCIENCE

## THE OHIO JOURNAL OF SCIENCE

#### JOINT ADMINISTRATIVE BOARD

For Ohio State University

BERNARD S. MEYER ROBERT L. BATES For Ohio Academy of Science

CHARLES E. HOEL WARREN P. SPENCER

#### EDITORIAL STAFF

HENRY L. PLAINE	Editor-in-Chief
RICHARD A. POPHAM	Business Manager
THOMAS H. LANGLOIS	Book Review Editor
D. P. Irish	L. C. HunsickerMedical Sciences
Anthropology and Sociology	M. L. PoolPhysics and Astronomy
G. H. Brown	J. VERDUIN Plant Sciences
I. I. DICKMANConservation	W. R. ZEITLER Science Education
J. F. LOUNSBURYGeography	T. C. SURRARERZoology
W. A. RICEGeology	J. H. COOPER Subsection on Genetics

### THE OHIO JOURNAL OF SCIENCE

Is published jointly by The Ohio State University and The Ohio Academy of Science

# CONTENTS OF VOLUME 58

# NUMBER 1—JANUARY

	100
The Crisis Between Science and Society—A Modern Paradox	1
Dintera) W V Ralduf	7
Diptera). W. V. Balduf Notes on the Hepatic Flora of the Athens Area	15
Studies Concerning the Action of Bisulfite Solutions on the White Mold (Penicillium and	
Aspergillus SP. P) Isolated from Ailing Grass Silage. Lad A. Pasiut and F. DeMarinis	20
The Micro-Element Nutrition of Nostoc muscorum	$\frac{25}{34}$
Changes in the Status of Japanese Women.  Pongsun Choi Allen	39
Major Glacial Drainage Changes in Ohio	43
Additional Notes on the Dragonflies of Northwestern Ohio	50
Notice to Contributors  Book Notices	63
DOOR 11001003	, 00
NUMBER 2-MARCH	
Wisconsin Stratigraphy at Port Talbot on the North Shore of Lake Erie, Ontario  A. Dreimanis	65
Some Effects of Dietary Penicillin on the German Cockroach, Blatella germanica (L)	00
(Orthoptera: Blattidae)	84
	0.0
Josef N. Knull Variation in Heliabeic helianthaides (I) Sweet (Composites)  T. Richard Fisher	96
Variation in <i>Heliopsis helianthoides</i> (L) Sweet (Compositae)	31
Magicicada)	107
Dirofilaria scapiceps from the Rabbit (Sylvilagus floridanus mearnsi) In Ohio (Nematoda:	100
Dipetalonematidae)	128
NUMBER 3—MAY	
Inheritance of Black Hair Patterns in Cattle Lacking the Extension Factor for Black (E).	
III. A Multiple Allelic Hypothesis to Explain the Inheritance of Blackish and	100
Blackish Pattern	133
Jesse H. Day and Lawrence H. Talley	140
A Study of the Steric Requirements of the 9-Anthracyl Group and their Contribution to the	
Preparation of 9-Anthracylboron Compounds Vance H. Dodson and William E. Fisher	141
Bacteria Parasitic on Plants in Ohio	145
R. G. Washburn, L. O. Gilmore and N. S. Fechheimer	150
Two New North American Buprestidae (Coleoptera)	153
Ctenicera idahoensis a New Name for Ctenicera acuta (Knull) (Coleoptera: Elateridae)	154
African Ancestry of the White American Population	
	154
Some Constants of Toad Fat Fritz Fromm	154 155 161
Some Constants of Toad Fat	155 161
Some Constants of Toad Fat. Fritz Fromm Studies on the Effects of Progesterone on the Physiology of Reproduction in the Mink, Mustela vican Beryl C. Franklin	155 161 163
Some Constants of Toad Fat. Fritz Fromm Studies on the Effects of Progesterone on the Physiology of Reproduction in the Mink, Mustela vican Beryl C. Franklin	155 161
Some Constants of Toad Fat.  Fritz Fromm Studies on the Effects of Progesterone on the Physiology of Reproduction in the Mink,  Mustela vison.  Beryl C. Franklin Rock Mill.  Wilber Stout Light-Scattering, Intrinsic Viscosity, and Gold Number Relationships for Some Dextran Practions.  M. K. Humdy, E. Gardner, O. Van Winkle and G. L. Stahly	155 161 163 171 177
Some Constants of Toad Fat	155 161 163 171 177 182
Some Constants of Toad Fat	155 161 163 171 177
Some Constants of Toad Fat.  Fritz Fromm Studies on the Effects of Progesterone on the Physiology of Reproduction in the Mink,  Mustela vison.  Beryl C. Franklin Rock Mill.  Wilber Stout Light-Scattering, Intrinsic Viscosity, and Gold Number Relationships for Some Dextran Practions.  M. K. Humdy, E. Gardner, O. Van Winkle and G. L. Stahly	155 161 163 171 177 182

NUMBER 4—JULY		
The Effects of Pollution on a Midwestern Stream	197	
Richard P. Goldthwail Wisconsin Age Forests in Western Ohio. II. Vegetation and Burial Conditions	209	
George W. Burns Ecological Notes on the Pine Midges Retinodiplosis resinicola (Osten Sacken) and R. inopis	220	
(Östen Sacken) in Southern Öhio (Diptera, Itonididae)	231 235	
A Comparative Study of the Mechanics of Flying and Swimming in Some Common Brown Bats		
NUMBER 5—SEPTEMBER		
Pseudoscience and Antiscience in an Age of Science	261 270	
William E. Miller and Stuart A. Altmann	273	
One New Species and One Subspecies of Cerambycidae from Texas Josef N. Knull Light Diffraction by Single Striated Muscle Fibers Jurgen R. Meyer-Arendt	282 283	
Biographies of Geologists	285	
A Study of the Trypsinlike Protease of the Adult Stable Fly, Stomoxys calcitrans (L.)  Robert A. Putterson and Frank W. Fisk	299	
Food, Growth and Sexual Dimorphism of the Redside Dace Clinostomus elongatus (Kirtland) in Linesville Creek, Crawford County, Pennsylvania	911	
Frank H. Schwartz and John Norvell A Preliminary Investigation of the Social Psychology of Attitudes Toward Medical Doctors Emily M. Net	311	
Book Notices 272, 281,	324	
NUMBER 6—NOVEMBER		
Helminth Parasites of the Short-Tailed Shrew in Central Ohio Vernon H. Oswald Daily Weather Maps as Illustrations of Weather Types Jack Richard Villmow The Chemistry of the Membranes of the Egg Envelope of Cruzia americana, Maplestone	325 335	
1930 (Nematoda: Kathlaniidae)	343	
Some Causes Underlying Cellular Differentiation Richard A. Popham The Toxicity of Some Amines for Duckweed, Lemna minor Fritz Fromm	347 354	
The Vascular Flora of the Vinton Furnace Experimental Forest	357	
Notes on the Anthonominae (Coleoptera, Curculionidae)	366	
N. N. Williams and G. E. Gilbert Some Algae from the Ohio River Drainage Basin Allan Hirsch and C. Mervin Palmer	371 375	
Index to Volume 58         334, 353, 370,           Book Notices         334, 353, 370,	383	

# PUBLICATION DATES OF THE OHIO JOURNAL OF SCIENCE

Volume 58, 1958

Number 1—January	January	24,	1958
Number 2—March	March	24,	1958
Number 3—May	May	24,	1958
Number 4—July	July	30,	1958
Number 5—September	.September	19,	1958
Number 6—November	. December	8,	1958